# AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY

# **BEACH ACT GRANT APPLICATION FY2019**

# Implementation of the Coastal Recreational Water Monitoring and Public Notification Program



Director Fa'amao O. Asalele Jr.

Address: P.O Box PPA Pago Pago, American Samoa 96799

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# I. INTRODUCTION

The American Samoa Environmental Protection Agency (AS-EPA) hereby submits a FY2019 grant application for the Implementation of our Coastal Recreation Water Monitoring and Public Notification Program under the Beaches Environmental Assessment and Coastal Health (BEACH) Act.

The Territory of American Samoa is surrounded by approximately 149 miles of beaches. Residents and tourists of American Samoa use all of the 149 miles of beaches for swimming and family subsistence fishing. Thus, protection of public health by reducing the risk of disease acquired from swimming and recreating in contaminated waters is a great concern for the local community. Prior to 2002, the existing methods for monitoring recreational waters in the territory did not adequately protect public health.

## II. PROGRAM SUMMARY

In FY2002 AS-EPA developed and implemented an enhanced Coastal Recreational Water Monitoring and Public Notification Program as part of the AS-EPA Nearshore Marine Water Quality Monitoring Plan. The program used BEACH Act Grant funds to develop a beach monitoring and notification program consistent with the nine grant performance criteria. Funds were used for personnel costs, staff training, equipment, supplies, public notification, intensive surveys and special studies. The program was further developed to achieve the following: (1) establish a water quality database that integrates current and future efforts with previous data and identify water quality trends, (2) determine if selected water bodies support their designated uses for recreational swimming and family subsistence fishing support (305b efforts), and (3) verify the suitability of the American Samoa Water Quality Standards (ASWQS). As part of this monitoring program, a public notification process was also developed to inform the community of beaches that failed to meet the ASWQS for each sampling event.

In FY2003 through FY2011 AS-EPA continued with full implementation of the beach monitoring and notification program. AS-EPA also submitted an annual performance report, financial report, and monitoring and notification report for each fiscal year.

Beach Act Grant funding awarded in FY2012 through FY2013 enabled AS-EPA to enhance its beach monitoring and public notification program. After receiving first hand training by USEPA Region 9 Standards and TMDL staff, AS-EPA modified its excel beach database and enhanced the Beach Monitoring and Notification data submission through Access to STORET and PRAWN. AS-EPA continued with the weekly publishing of advisories in local print media and with the posting permanent beach advisory signs at public beaches in town areas. Weekly beach advisories are also available on the AS-EPA website- (see http://www.epa.as.gov/beach-advisory-2017).

A TMDL for all American Samoa beaches and streams on the 303(d) list of impaired waters was completed in 2013 for the pollutant enterococcus and approved by USEPA Region 9 on 22 September 2015.

In FY2014 the AS-EPA Coastal Recreational Water Monitoring and Public Notification Program was modified to meet the statutory eligibility requirements and statutory grant conditions for BEACH Act grants and CWA section 406 grants as listed in the National Beach Guidance and Required Performance Criteria for Grants, 2014 Edition (EPA-823-B-14-001). Information describing how the program meets each of the 11 grant performance criteria is provided below.

# **Grant Performance Criteria:**

#### 1. Risk-based Beach Evaluation and Classification

The Territory of American Samoa has approximately 149 miles of beaches. Beaches in American Samoa are, for the most part, characterized by the fringing coral reefs that surround all of the islands in the territory. Designated uses for these beaches are established in the ASWQS and include fishing and food gathering, recreation, support of marine life, mariculture, and scientific investigations.

Beaches were evaluated and classified according to (1) factors that indicate the potential risk to human health presented by pathogens, and (2) uses of the beach. Beach users are predominantly local residents and occasional tourists. The potential risk to human health presented by pathogens at each beach was determined using all available information of suspected sources of human pathogen contamination of the water, and of pollution threats from urban point sources and urban and agricultural nonpoint sources. Invariably, all coastal recreation waters in the Territory are used year round for primary contact recreation due to the tropical climate. An additional factor considered in the evaluation and classification process was the effect of storm events on the waters.

Based on these potential risk factors and uses, a four tiered process was used to rank beaches. A classification of Tier 1 indicates that waters receive high usage in relation to waters of Tier 2, 3, and 4, and as such, are the focus of more intensive monitoring (e.g. weekly sampling) and public notification efforts. Tier 2 waters include beaches that are remote and moderately risk waters that are sampled monthly in relation to Tier 1 waters. Tier 3 waters are beaches that are moderately used but also sampled weekly along with Tier 1 beaches. Finally, Tier 4 waters include beaches that are the least frequently used in relation to Tier 1, 2 and 3 waters. Tier 4 beaches are considered non-program beaches and are not currently monitored because of fiscal restraints. The List of Beaches is provided in Appendix D.

Public comments regarding the List of Beaches are addressed under Performance Criteria 11.

# 2. Tiered Monitoring Plan

A sufficient sampling design and monitoring plan was developed to adequately address the following monitoring elements: public health, maximum number of beaches, existing monitoring data, public review, adaptive monitoring approach, and quality control.

Moreover the monitoring plan was designed to specify frequency and location of monitoring and assessment of coastal recreation waters based on a) the periods of recreational use of the waters; b) the nature and extent of use during certain periods; c) the proximity of the waters to known point sources and nonpoint sources of pollution; d) the appropriateness of qPCR methods; and e) the potential uses of predictive tools.

Sampling is conducted throughout the year due to the tropical climate at weekly and monthly frequencies. Sites are grouped into sampling frequencies based on tiers and available resources. Tier 1 beaches, the high-risk waters, are sampled weekly and consist of seventeen beaches located within Pago Harbor and neighboring villages. Six beaches comprise Tier 2, the moderate risk waters, and are sampled monthly. The twenty-seven remote beaches of Tier 3 are sampled weekly and on the same days as Tier 1 waters. Although the degree of Tier 3 beach use warrants less concentrated monitoring relative to Tier 1 and 2 waters, Tier 3 beaches are sampled weekly as a result of increased program resources and in order to generate statistically significant sample sizes for determining designated use support for recreational swimming and family subsistence fishing. Due to the remoteness of Tier 4 beaches, as well as remaining resource constraints, these lowest risk waters are not sampled at regular frequencies. Tier 4 beaches will be monitored when sufficient resources become available.

This tiered monitoring approach allows for the inclusion of the maximum number of beaches to be sampled with the available resources. At sites where a stream empties into the beach area, samples are collected in close proximity to the mouth of the stream. Additional sampling is conducted if a specific request is made for sampling. Samples are collected no lower than knee depth, independent of tidal level. The monitoring program is designed to undergo modification if current research determines improved monitoring protocols.

In addition to these elements, the AS-EPA Coastal Recreation Water Monitoring Program undertook activities in support of establishing and implementing quality assurance and quality control (QA/QC) procedures, including producing data quality objectives (DQOs) and standard operation procedures (SOPs) to be applied to sample collection and data management. Documentation equivalent to a QMP and QAPP was submitted to EPA Region 9 to meet the AS-EPA consolidated grant requirements; this documentation was reviewed and approved by the EPA Region 9 Quality Assurance Officer.

Public comments regarding the monitoring plan are addressed under Performance Criteria 11.

#### 3. Methods and Assessment Procedures

The AS-EPA Water Quality Laboratory Staff is experienced in sample collection and performance of microbiological techniques needed to analyze water samples. The AS-EPA Laboratory is fully certified by EPA Region 9 to analyze water samples, and all AS-EPA laboratory personnel are certified as laboratory analysts for the detection of microbial contamination in water samples. The AS-EPA Laboratory has the capability to analyze water for total coliforms and E. coli using the IDEXX Colilert18® method, and enterococcus using the IDEXX Enterolert™ method. Marine samples are analyzed using the Enterolert™ method. Enterococci are enumerated using most probable number (MPN). A standard operating procedure was created for the Enterolert™ method, and includes procedures for sample collection, handling, and analysis.

The climate of the Territory is tropical, with June through September being the driest months and December through March being the wettest, but heavy showers occur consistently throughout the year, often times on a daily basis (e.g., 3 inches/day is not unusual). Due to the incidence of heavy rain events as well as frequency of sampling AS-EPA utilizes a conservative approach for beach advisories based on exceedances of a single sample instead of a geometric mean.

The assessment procedures for identifying short-term increases in pathogens and pathogen indicators which are harmful to human health in coastal recreation waters are based on the ASWQS Implementation Guidance Manual. The manual states that compliance for maximum allowable bacteria levels for beach advisories, the Beach Action Value (BAV), shall be based on any single sample exceedance of the statistical threshold value of 130 MPN/100 ml enterococci.

Data verification and validation procedures are performed on all monitoring data.

# 4. Monitoring Report Submission

AS-EPA compiles all monitoring data into timely reports consistent with the list of required data elements. Monitoring data is reported by fiscal year, and is submitted weekly to USEPA to the Beach Advisory and Closing On-line Notification (BEACON) via STORET website and in print as an attachment to the AS-EPA Water Program's annual program review reports. Monitoring data is also provided weekly to other local agencies and individuals concerned with water quality data and bi weekly to the American Samoa Governor's Office. In addition, these reports are made available to the public via the mass media.

## 5. Delegation of Monitoring Responsibilities

AS-EPA is responsible for the coastal recreation waters monitoring and public notification program. AS-EPA does not delegate to local governments responsibility for implementing the monitoring and notification program.

#### 6. Public Notification and Risk Communication Plan

AS-EPA developed a Public Notification and Risk Communication Plan as part of the Coastal Recreation Water Monitoring Program. The plan was designed to identify measures to notify EPA, local government, and the public when indicator bacteria levels exceed a BAV and identify measures to notify the public by posting a sign or functional equivalent. The plan describes efforts and measures taken by the AS-EPA to inform the public of the potential risks associated with water contact activities in the coastal recreation waters that do not meet the ASWQS. The plan also describes the notification report submission and delegation process utilized by AS-EPA. The Public Notification and Risk Communication Plan is available for public review on an annual basis as part of the public evaluation of the AS-EPA Coastal Recreational Water Quality Monitoring Program.

# 7. Actions to Notify the Public

AS-EPA issues water quality exceedance advisories as public notices to promptly communicate to the public, USEPA, and the local government that coastal recreation waters are not meeting or are not expected to meet the BAV.

Public notices are prepared by AS-EPA Staff on the same day that the results are available and are disseminated in English and Samoan, and additional languages if requested, bearing in mind the various cultural groups that reside on island. Public notices include information explaining the potential risks associated with water contact activities in the coastal recreation waters that do not meet the BAV, and recommend to the public to avoid swimming in such waters to reduce the potential of contracting a swimming related illness. Additionally, public notices include details identifying problem beaches, explanations for the advisory, duration of the advisory, and contact information for the AS-EPA.

In the event of an imminent public health hazard (sewage line break or other high-risk contamination source) at a beach, AS-EPA officially closes the beach and any contaminated recreation waters adjacent to the beach. Beaches remain closed to the public until further sampling and laboratory analyses indicate that enterococci concentrations do not exceed the BAV.

Several measures are taken to inform the public of an advisory or beach closure. The primary means for prompt communication are beach advisory signs, the AS-EPA website (<a href="https://www.epa.as.gov/current-beach-advisory">https://www.epa.as.gov/current-beach-advisory</a>), local radio and television stations, and local newspaper, Samoa News. The beach advisory signs are shape-coded to indicate a beach being good and safe (e.g. triangle) and contaminated (e.g. diamond). Beach signs are changed every week after results are received.

Public comments regarding evaluation of notification programs effectiveness are addressed under Performance Criteria 11.

# 8. Notification Report Submission

AS-EPA submits electronic program reports weekly to USEPA to the Beach Advisory and Closing On-line Notification (BEACON) website via PRAWN and bi-weekly to the American Samoa's Governor's Office. Reports provide data on the occurrence, nature, location, pollutant involves and the extent of any exceedance of any WQS for pathogens and pathogen indicators. In addition, AS-EPA submits electronic annual reports to USEPA Region 9 summarizing all data, exceedances of the BAV, and actions taken to notify the public.

# 9. Delegation of Notification Responsibilities

AS-EPA is responsible for the coastal recreation waters monitoring and public notification program. AS-EPA does not delegate responsibility for implementing the monitoring and notification program to local governments.

# 10. Adoption of new or Revised WQS and Identification and use of a Beach Notification Threshold

In 2013 American Samoa adopted revised WQS which included the USEPA 2012 Recreational Water Quality Criteria. The revised ASWQS were approved by USEPA Region 9 in 2014.

In 2014 AS-EPA identified 130 MPN enterococci/100 ml as the appropriate BAV for American Samoa's tropical marine waters. AS-EPA implemented use of the BAV on 01 October 2014. A formal justification for the BAV was approved by USEPA Region 9 in January 2015.

## 11. Public Evaluation of Program

AS-EPA employs several methods to provide the public with opportunities to review and to comment on the AS-EPA Coastal Recreation Water Monitoring Program. Public notices are issued annually via the local newspaper, Samoa News, requesting public comments regarding (1) the beach evaluation and classification process, including a list of waters to be monitored and beach ranking; (2) the sampling design and monitoring plan, including sampling location and sampling frequency; and (3) the public notification and risk communication plan, including methods to notify the public of a beach advisory. To achieve these ends, AS-EPA maintains a file containing the AS-EPA Nearshore Marine Water Quality Monitoring Plan, a summary of historical bacteriological data of coastal recreation waters, the ASWQS, and the advisory format used to give notice to the public that the coastal recreation waters are not meeting or are not expected to meet the BAV. In FY2017, the public was invited to review this file and submit comments in writing to AS-EPA within 30 days of the published date of the notice. A copy of the AS-EPA Public Notice – Request for Comments is provided in Appendix A.

# **Program Objectives for FY2019**

AS-EPA will continue implementation of the beach monitoring program and continue to provide beach advisories as described in the AS-EPA Public Notification and Risk Communication Plan. Beach data will also be utilized to fulfill the American Samoa NonPoint Source Monitoring Strategy requirements and the Integrated Water Quality and Assessment Report requirements.

An FY2019 Program Budget is provided in Appendix B.

# III. DATA SUBMISSION PLAN

The first version of the AS-EPA Data Submission Plan was submitted on 30 January 2012. An updated 2019 AS-EPA Data Submission Plan is provided in Appendix C.

# Appendix A. Public Notice - Request for Comments

# **American Samoa Environmental Protection Agency**

# **Public Notice**

The American Samoa Environmental Protection Agency (AS-EPA) has developed the AS-EPA Nearshore Marine Water Quality Monitoring Plan that addresses the need to monitor for nonpoint source pollution in American Samoa. A main group of pollutants that cause water quality impairments in American Samoa are pathogen indicators, specifically enterococcus in coastal recreation waters. Two objectives of the AS-EPA Nearshore Marine Water Quality Monitoring Plan are to determine whether nearshore marine water quality meets the American Samoa Water Quality Standards (ASWQS) for enterococcus, and to inform the public when coastal recreation waters do not meet ASWQS for enterococcus, as well as the potential risks associated with the polluted waters.

The AS-EPA has created a file that contains the AS-EPA Nearshore Marine Water Quality Monitoring Plan, a summary of historical bacteriological data of coastal recreation waters, the American Samoa Water Quality Standards, and the advisory format used to give notice to the public that the coastal recreation waters are not meeting or are not expected to meet applicable water quality standards for enterococci. These documents are available to the public at the AS-EPA office in Utulei. AS-EPA invites public comments concerning the monitoring and public notification program regarding: (1) the beach evaluation and classification process, including a list of waters to be monitored and beach ranking; (2) the sampling design and monitoring plan, including sampling location and sampling frequency; and (3) the public notification and risk communication plan, including methods to notify the public of a beach advisory. Comments must be submitted in writing within 30 days of the published date of this notice. Submit comments to the AS-EPA office or by mail to AS-EPA Water Program, P.O. Box PPA, Pago Pago, American Samoa 96799. For more information, please contact Christianera Tuitele at 633-2304.

# Appendix B. FY2019 Program Budget

# **American Samoa Environmental Protection Agency**

# Implementation of Coastal Recreational Water Monitoring and Public Notification

## PROJECT BUDGET FY2019

# Staff Training

\$23,000

The AS-EPA Beach Monitoring staff will attend meetings / conferences and trainings relating to water quality monitoring, analysis, and safety in water; QA/QC for laboratory work; watershed planning and comprehensive monitoring. Staff will also seek trainings to study and become skilled on nutrient posing threats to water bodies of American Samoa and how to use the Nutrient analyzer.

# Equipment & Maintenance

\$13,000

\$73,000

Vehicle maintenance and transportation expenses for the purpose of performing field work, including collecting samples, transporting samples to laboratory, and posting of advisory signs. Purchase of a standby IDEXX Quanti tray sealer is required for the laboratory.

# Supplies

A one year supply of IDEXX reagent ENTEROLET™, IDEXX sample bottles (without preservatives) and Quanti Trays are required for the detection and quantification of enterococci in water samples. Miscellaneous supplies and consumables will be purchased as the need arise.

## Monitoring Personnel Costs

\$160,000

Grant funds will be utilized to for AS-EPA Beach Monitoring staff salaries.

# Public Notifications for Beach Advisories \$10,000

Grant funds will be utilized to finance publication costs for AS-EPA beach monitoring public notices. Public notices are issued weekly in the Samoa News, Samoa Post, as well as advisories issued via the local radio and television stations. Funds will also be utilized to support additional beach monitoring education and outreach programs as well as maintenance of existing beach signs.

# <u>Intensive Surveys and Special Studies</u> \$22,000

AS-EPA will use beach funds for partial salary of the AS-EPA Research Scientist in order to implement intensive surveys and special studies for scientific research to better protect the health of beach users, for the improvement of monitoring protocols and analytical

methods, and for the enhancement of data collection and analyses. Potential areas of interest include evaluating effectiveness of the AS-EPA Piggery Compliance Program by determining enterococci and nutrient load reduction at beaches, studying the appropriateness of current indicator organisms in tropical environments, and conducting an intense survey of selected streams for pathogen distribution and to initiate and develop a Beach Sanitary Survey.

**Budget Total** 

\$301,000

# Appendix C. FY2019 Data Submission Plan

Table E1	Description				
BEACH TRACKING ONETIME SUBMISSION					
Beach					
Name	See attached list "Beach Sampling Stations and Frequencies"				
Description	See attached list "Beach Sampling Stations and Frequenci				
Comment Text	See attached list "Beach Sampling Stations and Frequencies				
Organization					
Name	American Samoa Environmental Protection Agency				
Description	The state agency affiliated with the US EPA, Region IX				
Short Name/Abbreviation	AS-EPA				
Contact (State Lead/Beach Lead/Notification	on Lead)				
First Name	Aioletuna				
Last Name	Sunia				
Middle Initial	R				
Suffix	NA				
Title	Water Quality Chief, Water Program				
Suite/PO Box/Street/First Line	P.O. Box PPA				
City Name	Pago Pago				
State	AS				
ZIP Code	96799				
Electronic Address	aioletuna.sunia@epa.as.gov				
Telephone Number	6846332304				
Address Start Date	25May18				
Address Stop Date	Ongoing				
MONITORING ONETIME SUBMISSION					
Sampling Station					
Station Identifier	See attached list "Beach Sampling Stations and Frequencies"				
Station Name	See attached list "Beach Sampling Stations and Frequencies"				
Station Description	See attached list "Beach Sampling Stations and Frequencies"				
Water Level Measure	Knee deep				
Sampling Location Point					
Latitude Measure (UTM)	See attached list "Beach Sampling Stations and Frequencies"				
Longitude Measure (UTM)	See attached list "Beach Sampling Stations and Frequencies"				
Monitoring Lead Contact					
First Name	Aioletuna				
Last Name	Sunia				
Middle Initial	R				
Suffix	NA				
Title	Water Quality Chief, Water Program				
Suite/PO Box/Street/First Line	P.O. Box PPA				
City Name	Pago Pago				
State	AS				
ZIP Code	96799				

Electronic Address	aioletuna.sunia@epa.as.gov		
Telephone Number	6846332304		
Address Start Date	25May18		
Address Stop Date	Ongoing		

# **Appendix D. List of Beaches**

# American Samoa Environment Protection Agency Beach Sampling Stations & Sampling Locations

ID#	Location	Watershed No.	Latitude <sup>1</sup>	Longitude <sup>1</sup>	Frequency	Tier	Miles
1W	Nu'uuli Pala Lagoon	27	- 14.321721857	- 170.714181340	Weekly	1	4.39
2W	Nu'uuli Coconut Point	27	- 14.316862768	- 170.700381984	Weekly	1	4.39
3W	Nu'uuli Avau	26	- 14.307335428	- 170.694573971	Weekly	1	1.11
4W	Fatumafuti Beach	26	- 14.297999425	- 170.678319055	Weekly	1	1.11
5W	Faga'alu Beach	25	- 14.292206351	- 170.681509694	Weekly	1	0.67
6W	Gataivai Beach	25	- 14.284021101	- 170.677059742	Weekly	1	0.67
7W	Utulei DDW Beach	24	- 14.281110849	- 170.681721405	Weekly	1	1.32
8W	Utulei Samoana Beach	24	- 14.279128439	- 170.682482466	Weekly	1	1.32
9W	Fagatogo Stream Beach	24	- 14.277080928	- 170.690022473	Weekly	1	1.32
10W	Aua Pouesi Beach	24	- 14.270054236	- 170.666689313	Weekly	1	1.32
11W	Aua Stream Beach	24	- 14.270922763	- 170.665093992	Weekly	1	1.32
12W	Aua A&M Beach	24	- 14.275633670	- 170.664923426	Weekly	1	1.32
13W	Lauli'i Tuai Beach	23	- 14.287891776	- 170.652588993	Weekly	1	2.01
14W	Alega Stream Beach	22	- 14.280109159	- 170.637822950	Weekly	1	0.44
15W	Alega Beach	22	- 14.280375287	- 170.638302960	Weekly	1	0.44
16W	Avaio \$2 Beach	22	- 14.281033442	- 170.631565896	Weekly	1	0.44
17W	Nu'uuli Pala Spring	27	- 14.319707000	- 170.715294000	Weekly	1	2.92
	11.010707000 1770.710207000						
1M	Auasi Wharf Beach - reclassified in Tier 3 category, ID # 22Q						
2M	Aunu'u Wharf Beach	34	- 14.284351045	- 170.561312766	Monthly	2	3.37
3M	Ofu Beach	36	- 14.174186111	- 169.677661111	Monthly	2	5.19
4M	Olosega Beach	38	14.172683333	- 169.627822222	Monthly	2	4.05
5M	Ta'u Beach	40	- 14.240000000	- 169.510455556	Monthly	2	6.24

6M	Fitiuta Beach	40	- 14.214838889	- 169.423494444	Monthly	2	6.24
7M	Faleasao Beach	40	- 14.220655556	- 169.515580556	Monthly	2	6.24
			_				
1Q	Utumea East Beach	19	- 14.271375320	- 170.569526533	Weekly	3	0.56
2Q	Aganoa Beach (before Auasi)	19	- 14.274708453	- 170.578366793	Weekly	3	0.56
3Q	Aoa Bridge Stream Beach	15	- 14.261424593	- 170.586382218	Weekly	3	1.49
4Q	Sa'ilele LMS Beach	14	- 14.256291787	- 170.597749685	Weekly	3	1.48
5Q	Masefau Bridge Stream Beach	12	- 14.255765320	- 170.631701781	Weekly	3	4.53
6Q	Fagaitua HS Beach	21	- 14.268869759	- 170.615740084	Weekly	3	1.84
7Q	Auto Three Kings Mart Beach	21	- 14.278144357	- 170.628074435	Weekly	3	1.84
8Q	Vatia Bridge Stream Beach	10	- 14.250567996	- 170.675219554	Weekly	3	4.01
9Q	Fagasa-Fagalea Stream Beach	8	- 14.285481939	- 170.720604358	Weekly	3	2.29
10Q	Malota Stream Beach	3	- 14.303693798	- 170.815880565	Access denied	3	0.44
11Q	Malota Gurr Beach	3	- 14.304100367	- 170.816455845	Access denied	3	0.44
12Q	Amanave LMS Beach	33	- 14.326364580	- 170.830318637	Weekly	3	1.85
13Q	Utumea West Beach	32	- 14.329360954	- 170.815022751	Weekly	3	2.65
14Q	Leone Pala Bridge Beach	30	- 14.336459091	- 170.787326519	Weekly	3	2.47
15Q	Taputimu Sliding Rock	30	- 14.359240763	- 170.778352633	Weekly	3	2.47
16Q	Asili LMS Beach	31	- 14.331352000	- 170.797026000	Weekly	3	1.24
17Q	Maliu Mai Beach	28	14.341446000	- 170.721677000	Access Denied	3	3.48
18Q	Fagasa-Fagatele Boat House Beach	8	- 14.258234000	- 170.723971000	Weekly	3	1.15
19Q	Afono Beach	11	14.258540000	- 170.351631000	Weekly	3	3.44
20Q	Alofau Asasama Stream Beach	21	- 14.273389000	- 170.604501000	Weekly	3	1.23
21Q	Amouli Beach	20	- 14.274277000	- 170.585368000	Weekly	3	2.41
22Q	Auasi Wharf Beach	19	- 14.271586669	- 170.572921948	Monthly	2	0.56
23Q	Alao Beach	18	- 14.263676000	- 170.563593000	Weekly	3	0.70
24Q	Tula Beach	17	- 14.254213000	- 170.564216000	Weekly	3	2.50

25Q	Onenoa Beach	16	- 14.251609000	- 170.581501000	Weekly	3	0.90
26Q	Maliu Mai Swimming Hole	28	- 14.340956000	- 170.721741000	Access Denied	3	3.48
27Q	Masausi Beach	13	- 14.255236000	- 170.611922000	Weekly	3	1.69
1Nm	Poloa Beach	1	14.317461000	- 170.834867000	TBD	4	1.35
2Nm	Fagali'i Beach	2	14.306381000	170.825856000	TBD	4	1.81
3Nm	Fagamalo Beach	4	14.298264000	170.810114000	TBD	4	3.24
4Nm	Aoloau Sasae	5	14.292653000	170.791836000	TBD	4	3.33
5Nm	Aoloau Sisifo	6	14.295042000	- 170.779692000	TBD	4	2.62
6Nm	Aasu Beach	7	14.292161000	- 170.759631000	TBD	4	4.48
7Nm	Fagatuitui - Vaaogeoge	9	14.262431000	- 170.705375000	TBD	4	8.61
8Nm	Masausi Beach - reclassified in Tier 3 category, ID # 27Q						
9Nm	Onenoa Beach - reclassifed in Tier 3 category, ID # 25Q						
10Nm	Tula Beach - reclassifed in Tier 3 category, ID # 24Q						
11Nm	Alao Beach - reclassifed in Tier 3 category, ID # 23Q						
12Nm	Amouli Beach - reclassifed in Tier 3 category, ID # 21Q						
13Nm	Tafuna Plain Beach & Swimming Hole - reclassified in Tier 3 category, ID # 17Q & # 26Q						
14NM	Afono Beach- reclassified in Tier 3 category, ID # 19Q						
15Nm	Fagatele - Larsen	29	14.358589000	- 170.752358000	TBD	4	5.73
16Nm	Asili Beach - reclassified in Tier 3 category, ID # 16Q						
17Nm	Aunuu Sasae	35	14.284692000	- 170.546589000	TBD	4	0.11
18Nm	Ofu Matu	37	14.167372000	- 169.633589000	TBD	4	4.16
19Nm	Olosega Sasae	39	14.172336000	- 169.609708000	TBD	4	3.36
20Nm	Tau Saute	41	14.248861000	- 169.459931000	TBD	4	6.36

**NOTE**<sup>1</sup>: Latitude and Longitude measured using the Universal Transverse Mercator System

<u>NOTE</u><sup>2</sup>: Recreational waters classified as Tier 4 beaches are non-program beaches and are not currently sampled. Tier 4 recreational waters will be sampled as resources become available.

<sup>\*</sup>TBD - To be determined

BEACH TRACKING CONTINUOUS SUBMISSIONS					
Organization					
Name	American Samoa Environmental Protection Agency				
Description	The state agency affiliated with the US EPA, Region IX				
Short Name/Abbreviation	AS-EPA				
Contact (State Lead/Beach Lead/Monitoring	Lead/Notification Lead)				
First Name	Aioletuna				
Last Name	Sunia				
Middle Initial	R				
Suffix	NA				
Title	Water Quality Chief, Water Program				
Suite/PO Box/Street/First Line	P.O. Box PPA				
City Name	Pago Pago				
State	AS				
ZIP Code	96799				
Electronic Address	aioletuna.sunia@epa.as.gov				
Telephone Number	684-633-2304				
Address Start Date	05-May-18				
Address Stop Date	On-going On-going				